

*[Handwritten signature]*

---

c. a water-soluble glycol liquid consisting of at least one member of the group consisting of ethylene glycol, and propylene glycol, wherein said water-soluble glycol liquid is present in an amount of from about 20 to about 80 wt % of the suspension.

REMARKS

The examiner has rejected claims 1-18 under 35 U.S.C. 103 over LeClair et al, in view of Arnold and JP 63303903 (JP '903). The examiner asserts that it would have been obvious for one skilled in the art to combine these references to produce the presently claimed invention. Applicants submit that this ground of rejection is not well taken.

The present invention relates to agricultural compositions. Specifically, it teaches a non-aqueous, stable agricultural suspension which comprises a) agricultural solids consisting of at least one member selected from the group consisting of a fertilizer, an adjuvant, a herbicide and a pesticide, said agricultural solids having particles more than about 99 wt.% passable through a Tyler #48 sieve; b) a single non-ionic surfactant selected from the group consisting of alkyl-phenoxy-poly(ethyleneoxide)alkanols, ethoxylated aliphatic C<sub>11</sub> to C<sub>15</sub> alcohols, ethylene oxide-propylene oxide block copolymers and ethoxylated fatty acids; and c) a water-soluble glycol liquid consisting of at least one member of the group consisting of ethylene glycol, and propylene glycol, wherein said water-soluble glycol liquid is present in an amount of from about 20 to about 80 wt % of the overall suspension. In a preferred embodiment, the suspension comprises an ammonium sulfate adjuvant. Such suspensions exhibit superior stability and pour properties.

The examiner is correct that LeClair et al. relates to herbicides. More particularly, it teaches a *solid* herbicide composition in suspension form, which comprises from 25-50% of a herbicide, 0-15% of a triazine, and an emulsion/suspension system. Regarding claims 1-9, the examiner is correct that LeClair teaches components (a) and (b) namely, a herbicide, EO/PO or an alkyl phenoxy polyoxyethylene ethanol. However, LeClair

differs from the present invention in that this reference further fails to teach component (c) of claim 1, namely a water soluble glycol liquid which is present in an amount of from about 20 to about 80% by weight of the overall suspension. Indeed, LeClair teaches the inclusion of ethylene glycol in their overall composition, but only at a small fraction of the amount which is required by the present invention (see LeClair et al., claims 3, 4, and 6). Furthermore, LeClair teaches an emulsion/suspension system which requires the presence of *water*, while the present invention claims a solids suspension which, although dispersible in water, does not require water in the claimed composition (see LeClair et al., claims 1-8). Regarding claims 10-18, the present invention teaches a suspension which requires (a) ammonium sulfate particles which are more than about 99 wt.% passable through a Tyler #48 sieve; (b) a single non-ionic surfactant selected from the group consisting of alkyl-phenoxy-poly(ethylenoxide)alkanols, ethoxylated aliphatic C<sub>11</sub> to C<sub>15</sub> alcohols, ethylene oxide-propylene oxide block copolymers and ethoxylated fatty acids; and (c) a water-soluble glycol liquid consisting of at least one member of the group consisting of ethylene glycol, and propylene glycol. The examiner recognizes that LeClair et al do not teach a glyphosate or ammonium sulfate.

The examiner thus urges that it would be obvious for one skilled in the art to formulate the present invention upon a combined reading of LeClair et al. with Arnold and JP '903 since both Arnold and JP '903 teach herbicides which include ammonium sulfate. However, neither Arnold nor JP '903 references teach or suggest the formation or presence of a suspension. JP '903 fails to teach a herbicide in suspension form. Arnold teaches a method for forming a *solid* granular herbicide composition. Furthermore, Arnold fails to teach the presence of a water soluble glycol liquid, such as ethylene glycol or propylene glycol, as taught by the present invention. Rather, Arnold teaches the presence of *polyethylene glycol* which is commonly present in the form of a wax, such as carnauba wax. The examiner leaps to the conclusion that since all of the cited references teach herbicidal compositions, that it would have been obvious for one skilled in the art to combine the teachings of LeClair et al., Arnold, and JP '903 to formulate the presently claimed invention. The examiner is of the view that it would be obvious to formulate the instant suspension because all of the components are known *individually* for use in a

herbicidal composition. It is submitted that this position is incorrect because there is no suggestion of the compatibility of these individual components together. However, obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching, suggestion or incentive supporting the combination. In re Geiger, 1 USPQ2nd 1276 (CAFC, 1987). It is submitted that there is no teaching or suggestion in any of the cited references which would lead one skilled in the art to combine LeClair et al., which fails to teach several key features of the invention, with Arnold or JP '903, which both fail to teach a suspension, in an effort to devise the presently claimed invention. In this regard, Applicants submitted that the examiner is impermissibly reconstructing the art in light of Applicant's disclosure.

The examiner also states that it would have been obvious for one skilled in the art to use ingredients having the same particle sizes and amounts as those taught by the present invention. Applicants respectfully disagree. It is submitted that, when working with suspensions, the interaction between a particular liquid, particle, and surfactant is very difficult, and often impossible, to predict. Applicants respectfully submit that the examiner is using an impermissible "obvious to try" standard of patentability. The fact that one skilled in the art *could* use such ingredients does not show that one skilled in the art would have any motivation *per se* which would lead them to formulate the present invention upon a reading of the cited references. It is therefore respectfully requested that the 35 U.S.C. 103 rejection be withdrawn.

With regard to dependent claims 2-9 and 11-18, it is not seen where these feature details are in the cited references. The Applicant appreciates the indication of allowability of claims 19 and 20.

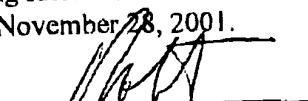
The undersigned respectfully requests re-examination of this application and believes it is now in condition for allowance. Such action is requested. If the examiner believes there is any matter which prevents allowance of the present application, it is requested that the

undersigned be contacted to arrange for an interview which may expedite prosecution.

Respectfully submitted,

  
Richard S. Roberts  
Reg. No. 27,941  
P.O. Box 484  
Princeton, New Jersey 08542  
(609) 921-3500  
Date: November 28, 2001

I hereby certify that this paper is being facsimile transmitted to the Patent and Trademark  
Office (FAX No. 703-308-4556) on November 28, 2001.

  
Richard S. Roberts  
Reg. No. 27,941

## APPENDIX

MARKED-UP CLAIMS

1. A stable agricultural solids suspension readily dispersible in water comprising:
  - d. agricultural solids consisting of at least one member selected from the group consisting of a fertilizer, an adjuvant, a herbicide and a pesticide, said agricultural solids having particles more than about 99 wt.% passable through a Tyler #48 sieve;
  - e. a single non-ionic surfactant selected from the group consisting of alkyl-phenoxy-poly(ethylenoxide)alkanols, ethoxylated aliphatic C<sub>11</sub> to C<sub>15</sub> alcohols, ethylene oxide-propylene oxide block copolymers and ethoxylated fatty acids; and
  - f. a water-soluble glycol liquid consisting of at least one member of the group consisting of ethylene glycol, and propylene glycol, wherein said water-soluble glycol liquid is present in an amount of from about 20 to about 80 wt % of the suspension.